"DIASTOLIC DYSFUNCTION AS AN EARLY INDICATOR OF CIRRHOTIC CARDIOMYOPATHY IN DECOMPENSATED LIVER DISEASE"

ABSTRACT

INTRODUCTION: Cirrhotic cardiomyopathy is a subclinical cardiac failure which tends to manifest under conditions of stress. The disease is characterized by the presence of electrophysiological abnormalities as QT interval prolongation and diastolic dysfunction / impaired contractile responsiveness to stress in the absence of other known cardiac disease. In our study group, analysis was made to find the occurrence of diastolic dysfunction as an early indicator of decompensated liver disease using conventional echocardiography.

MATERIALS AND METHODS: A single centre observational prospective study was conducted with 60 cases of decompensated liver diseased patients. Data was collected in a pretested proforma from eligible patients after obtaining a written informed consent. The ECG was studied for the presence of prolonged QT interval (rate corrected) and a Conventional 2D Echocardiography was performed to evaluate the diastolic dysfunction. They were subjected to detailed history taking and clinical examination. Severity of the cirrhosis was evaluated by Child-Pugh criteria and divided in three groups: A(mild), B(moderate), and C(severe).

RESULTS: Diastolic dysfunction has highly significant correlation with increasing severity of liver disease (by child-pugh scoring system) and hepatic encephalopathy and also significant correlation with increasing bilirubin levels(jaundice) and ascites. Age, sex and causative factors have no significant correlation with diastolic dysfunction.

CONCLUSION: Cirrhotic cardiomyopathy with QTc prolongation and diastolic dysfunction is prevalent in two-fifth (40%) cirrhotic patients of our study group with normal systolic function at rest. Increasing severity of liver cirrhosis from child pugh class A to C has highly significant correlation with increasing severity of diastolic dysfunction, hence **"Diastolic dysfunction serves as an early indicator of cirrhotic cardiomyopathy in assessing the severity in decompensated liver diseased patients".** Treatment is non-specific. Liver Transplantation may revert the cirrhotic cardiomyopathy.

KEYWORDS: Cirrhotic cardiomyopathy, decompensated liver disease, diastolic dysfunction, child pugh class scoring for severity of liver cirrhosis.